

$$F_g = G \frac{m_1 m_2}{d^2}$$

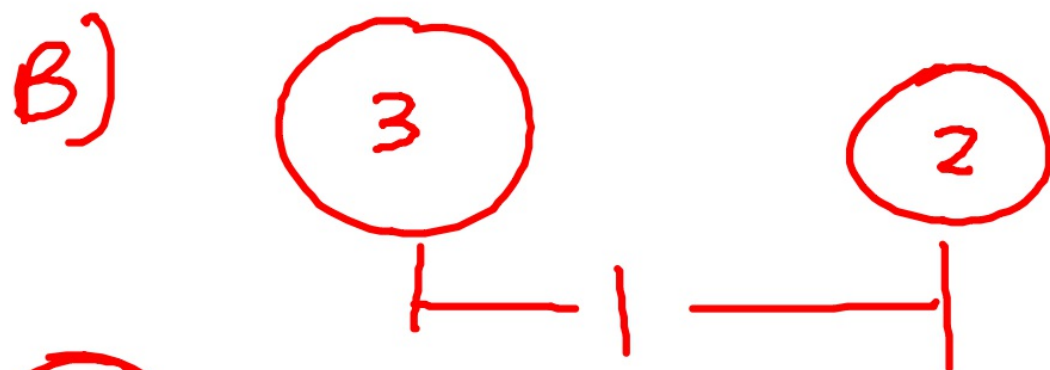
$$\sim 6.67 \times 10^{-11} \frac{\text{m}^2}{\text{kg}^2} \text{ N}$$

$$F_g \propto \frac{m_1 m_2}{d^2}$$

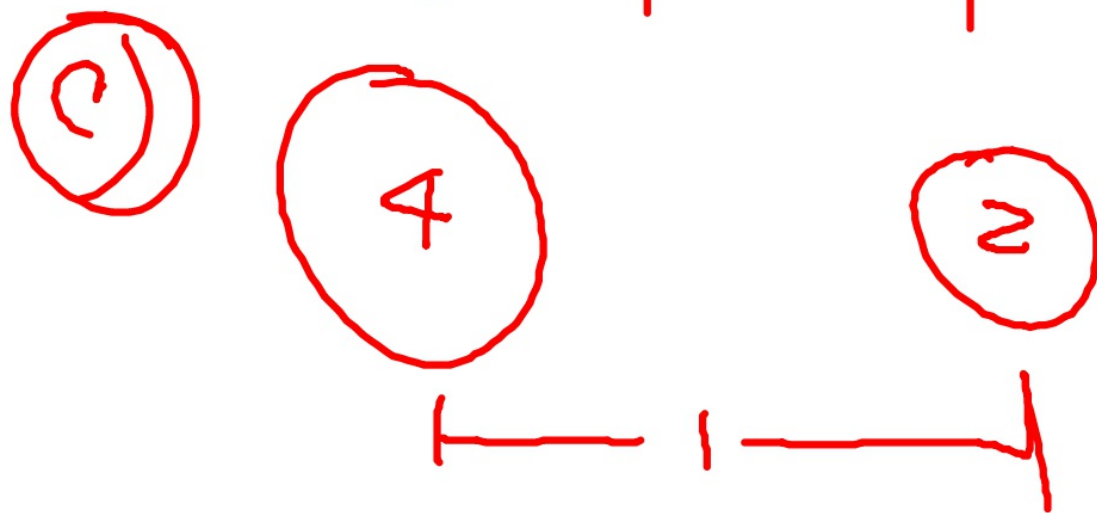


$$F_g \propto \frac{m_1 m_2}{d^2}$$

$$\frac{3 \times 1}{1^2} = 3 \text{ N}$$



$$\frac{3 \times 2}{1^2} = 6 \text{ N}$$



$$\frac{4 \times 2}{1^2} = 8 \text{ N}$$

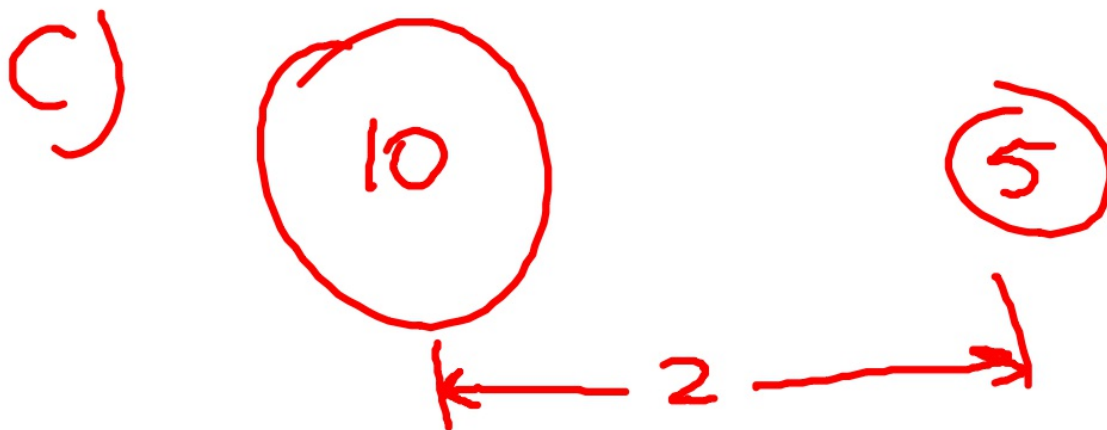


$$\frac{6 \times 2}{3^2} = \frac{12}{9} = 4$$

1.33 N



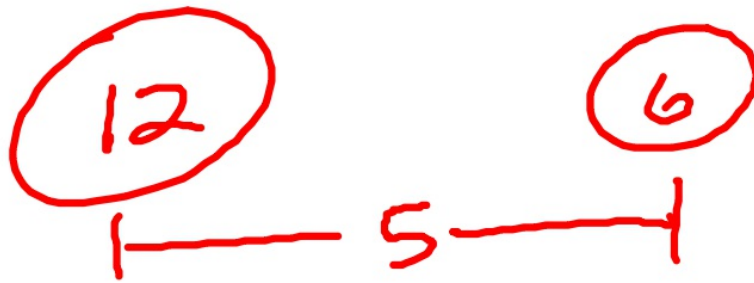
$$\frac{8 \times 3}{4^2} = \frac{24}{16} = 1.5 \text{ N}$$



$$\frac{10 \times 5}{2^2} = \frac{50}{4} = 12.5 \text{ N}$$

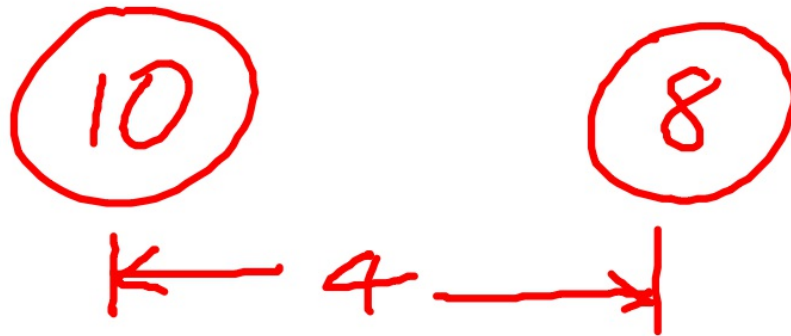
~~25 N~~

A)



$$\frac{6 \times 12}{5^2} = \frac{72}{25} = 2.88 \text{ N}$$

B)

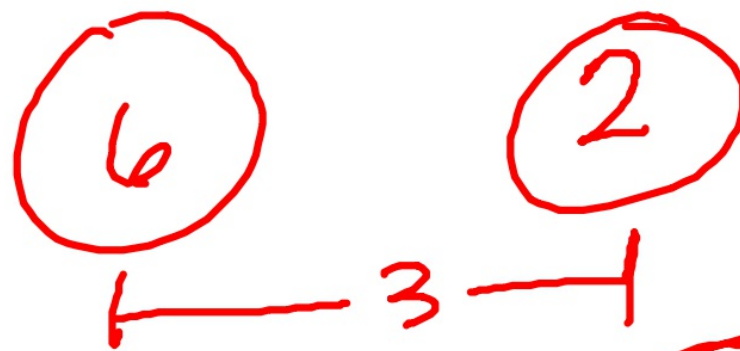


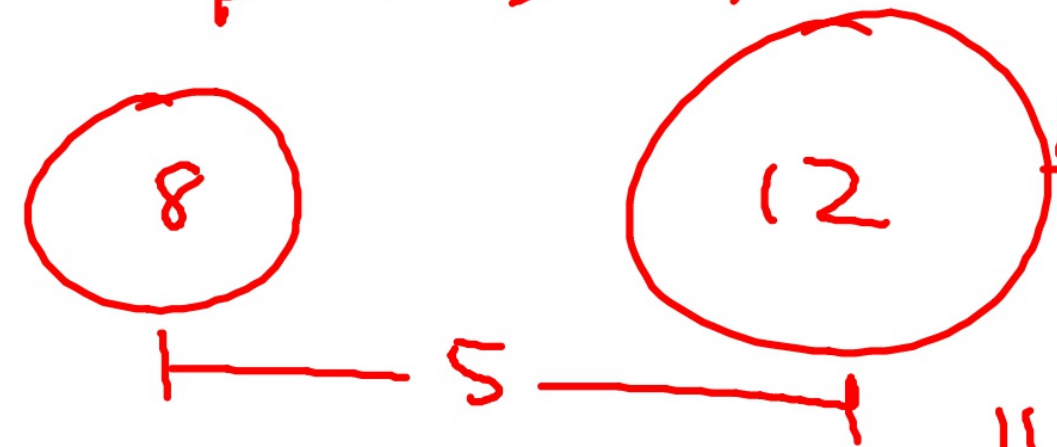
$$\frac{10 \times 8}{4^2} = \frac{80}{16} = 5$$

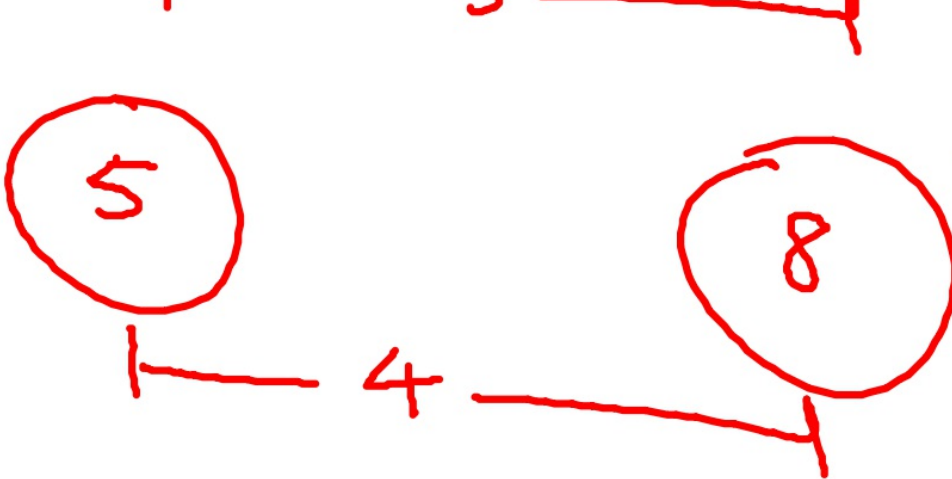
C)



$$\frac{20 \times 2}{6^2} = \frac{40}{36} = 1.1$$

A)   $\frac{12}{9} = 1.3 \text{ N}$

B)   $\frac{8 \cdot 12}{5^2} = 3.84 \text{ n}$

C)   $\frac{40}{16} = 2.5 \text{ N}$